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ABSTRACT

The purpose of this portion of a project was to compare External High School Diploma (EHSDP) competencies at Waukesha County (Wisconsin) Technical Institute with minimum high school competency requirements in (1) local school districts and (2) selected states. Testing focused on basic skills of mathematics, reading, and writing. Minimum competency requirements for high school graduation, in those states which have developed, or are developing, such requirements, tended to emphasize competencies related to reading, writing, and mathematics. A few states have focused competency requeriments on life skills, such as consumer economics, health, government/citizenship, and occupational preparedness. In general, basic skill competencies tended to be similar to those communication and computation competencies contained within the EHSDP. Life skills competencies tended to be similar to EHSDP competencies related to occupational preparedness, scientific awareness, consumer awareness, social awareness, decision making, and health and safety. Areas of difference appeared in certain types of skills which have not been specifically identified in the EHSDP competencies. These included the following: write legibly in manuscript or cursive form; spell correctly; study effectively; and in the area of mathematics, utilize propability and statistics. EHSDP competencies contained within the area of aesthetic expression tended to be lacking in the majority of minimum competency requirements which were reviewed. (Author)

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FINAL REPORT

Project Numbers: 40-001-146-130 & 08-026-146-130

EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM EVALUATION PROJECT - PART III

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DIVISION OF COMMUNITY AND MANPOWER EDUCATION

BUREAU OF PROGRAM DEVELOPMENT

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Abstract

External High School Diploma Program
Evaluation Project

Competency Comparison

The purpose of this portion of the project was to compare External High School Diploma (EHSDP) competencies at Waukesha County Technical Institute (WCTI) with minimum high school competency requirements in (a) local school districts within the district boundaries of WCTI and (b) selected states.

Project findings indicated that one local school district within the service area of the EHSDP conducted competency testing related to high school graduation. The testing focused on basic skills of mathematics, reading and writing.

Minimum competency requirements for high school graduation, in those states which have developed, or are developing, such requirements tended to emphasize competencies related to reading, writing, and mathematics. A few states have focused competency requirements on life skills such as consumer economics, health, government/citizenship, and occupational preparedness.

In general, basic skill competencies tended to be similar to those communication and computation competencies contained within the EHSDP. Life skills competencies tended to be similar to EHSDP competencies related to Occupational Preparedness, Scientific Awareness, Consumer Aware-

ness, Social Awareness, Decision Making, and Health and Safety.

Areas of difference appeared in certain types of skills which have not been specifically identified in the EHSDP competencies. These included: write legibly in manuscript or cursive form, spell correctly, study skills, and, in the area of mathematics, probability and utilization of statistics. EHSDP competencies contained within the area of Aesthetic Expression tended to be lacking in the majority of minimum competency requirements which were reviewed.

Foreword

This is the final section of a three part study which was designed to evaluate the External High School Diploma Program at Waukesha County Technical Institute.

Part I of the evaluation project presents the findings of a follow-up study of the first 50 graduates, individuals who terminated the program, and program inquirers.

Part II examines achievement levels of External High School Diploma Program graduates and current program participants as measured by the Test of General Educational Development (GED) and the Tests of Adult Basic Education, Level D (TABE).

Part III, which follows, is a comparison of External High School Diploma Program competencies with minimum competency requirements for high school graduation in various states.

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Chapter I

Introduction

The concept of lifelong learning implies that learning is a continuous process which occurs throughout all ages and stages of an individual's life. From an educational standpoint, lifelong learning further suggests that opportunities for pursuing education need to be available to both adults and youth. The External High School Diploma Program (EHSDP) at Waukesha County Technical Institute (WCTI) is designed to provide an opportunity for adults who have not completed high school to earn a standard high school diploma through the demonstration of competence in basic academic and life skills. While this program is not intended to be a replication of traditional high school programs, but rather an alternative for adults, it is based upon the assumption that there are certain competencies which reflect the ability to function adequately in adult life. A similar assumption is operationalized in high school programs specifying competencies which are necessary for graduation.

Statement of Purpose

The purpose of this study was to compare External High School Diploma Program Competencies at Waukesha County Technical Institute with minimum high school competency requirements in (a) local school districts within the WCTI district and (b) selected states.

In order to fulfill this purpose, the following questions

were raised:

(1) What are the minimum competency requirements in various school districts within the Waukesha County Technical Institute District?

(2) What are the minimum competency requirements for high school graduation in various states?

(3) What are the similarities and/or differences between these competencies and the competencies required for graduation from the EHSDP at WCTI?

Significance of the Study

Although there is still widespread debate among educators concerning the merits of competency-based education, the competency-based education movement has attempted to examine expectations with respect to educational outcomes. Specifically, the movement has been concerned with the issue of knowledge and skills which should be required of high school graduates.

Furthermore, Keefe and DeLeonibus (1979:9-10) suggested that competency-based education has helped to clarify the meaning of a high school diploma.

> Specifically, competency-based education represents the first concerted attempt of the public and profession to relate learning outcomes to life roles and to make successful demonstration of some of these outcomes prerequisites to earning a high school diploma. Advocates of the movement submit that CBE guarantees additional meaning to the diploma in no less than two ways:
>
> > That a student has demonstrated at least a minimum level of competence in the basic skills of reading, writing and computing.
> >
> > That a student has not only "covered" certain academic content, but has actually learned it.

Questions concerning the "meaning" of the high school diploma have also been raised with respect to adult high

school completion programs. Two specific questions which surfaced in regard to the EHSDP at WCTI dealt with (1) what content had been learned and (2) how did this content/learning compare with a "regular" high school program. Competency-based adult high school programs have, to a large extent, focused on the demonstration of competencies related to adult life roles. Nickse (1975:6) in describing the process involved in the development of competencies for the Central New York EHSDP, after which the WECTI EHSDP was modeled, identified two assumptions which provided a framework for the task force:

1. That although the acquisition of learning may be discrete, its application is wholistic. Therefore, competencies in the tool subjects (communication and computation) as well as in Life Skills must be survival-oriented and demonstrable in context.

2. That coping adults in a changing society must be able to use process skills such as data gathering, manipulation, and application in problem solving with information that is personally and socially relevant. Therefore, competencies and performances by which they are tested must be related to the common developmental tasks of adulthood.

If in fact, there are in existence competencies which should be prerequisites for high school graduation as well as competencies which reflect adult life roles, it appears likely that such competencies would be relevant to high school programs designed for youth as well as in high school completion programs, such as the EHSDP, designed for adults. A comparison of both types of programs will contribute to an understanding of the similarities and/or differences between competencies required for high school graduates and re-

quisite competencies for completion of the EHSDP.

Definition of Terms

The following definitions were given to terms which have special connotations for this study.

(1) Competency refers to the application of knowledge, skills and attitudes necessary for functioning in life roles.

(2) Minimum Competency Requirements are the competencies which students are required to master in order to receive a high school diploma.

(3) Minimum Competency Tests may measure "school skills" such as addition or subtraction, or "life tasks" such as completion of a job application (Mizell, 1978:10).

(4) Competency-Based Adult Education "is a performance-based process leading to demonstrated mastery of basic and life skills necessary for the individual to function proficiently in society" (Taylor, 1978:33).

Limitations of the Study

The study was limited to a comparison of competencies required in the EHSDP at WCTI and those competencies required for graduation in selected school districts in Waukesha County and selected states.

No attempt was made to compare the means by which attainment of competencies was measured.

Organization of the Study

Chapter I has presented an introduction, statement of purpose, significance of the study, definition of terms, limitations of the study and organization of the study.

Chapter II, which follows, is a review of the literature related to this study.

Chapter III contains a description of the methodology, including a description of the population and data collection methods.

Chapter IV presents an analysis of data.

Chapter V includes the summary, conclusions, and recommendations.

Chapter II

Review of Literature

The degree to which educational institutions are preparing students to function in a societal context has been of increasing concern to both educators and the general public. Those individuals who complete high school, either through a regular high school program or an adult high school completion program, are expected to be competent in at least the basic skills of reading, math, and language arts. Other expectations are related to the ability to function adequately in adult life roles. Issues relative to these expectations have to do with specification of required competencies for high school graduation, the process by which competencies will be measured, and the procedure for certifying the attainment of competencies. This review of literature presents an overview of studies related to competency requirements for high school graduation.

The movement toward minimum competency requirements has been attributed to a variety of factors. Moore, Memory and Seaton (1979) identified the following influences: Increased media publicity has incited the general public while periodic newspaper publications of standardized test scores have precipitated demands that a high school diploma represent achievement; there is increasing consensus that schools should be held accountable for the large sums of money spent, and in some states lawsuits have been filed charging education malpractice.

Demands by parents and employers have influenced legislators of some states to move in the direction of minimum competency requirements. As of March, 1978, 33 states had either legislation or state board of education rulings mandating some type of competency-based education.

Greene (1978) indicated that many proponents, who advocate the adoption of minimum competency requirements , see it as a way to make certain those pupils having difficulty with Basic Skills will receive proper instruction and remediation thereby restoring meaning to the high school diploma.

In presenting his case for competency-based education, Parnell (1978) cited societal changes, such as the media, increased mobility, the technical job market, consumer credit, complex units of government, and the break-up of the family unit as conditions demanding a revision of the schooling system as it exists.

Opponents of the movement do not view competency-based education or the adoption of minimum competencies as providing an adequate solution to present education problems. Wint (1979) suggested that the adoption of minimum competencies is actually a lowering of standards with the end product being mediocrity.

On the other hand, Coombs (1979) argues that for minimum competency testing to be justified, the harm (increased drop-out, decreased concern for individual differences in talents and interests, depreciated significance of other achievements) may not outweigh the good (acquiring the com-

petencies necessary for successful functioning as adults).

The specification and selection of competencies is another issue raised by critics of minimum competency requirements. The omission of competencies within the affective domain is an important issue which needs correction according to Dickman (1979) who perceives a need for persons to become purposive, intelligent, moral, spiritual, truthful, and loving if they are to become complete human beings. Dickman further suggested that competency-based education be expanded to include the development of these competencies.

On the other hand, Sandburg (1979) felt that it is impossible to identify competencies which adults need, or will need, particularly in our ever-changing technological society. Equally questionable is the process by which the lists of competencies are compiled.

The stance of proponents and opponents on competency requirements reflects the possibility of both positive and negative outcomes. The possible outcomes of utilizing competency measures for graduation are summarized as follows by Keefe and De Leonibus (1979: 21-22).

Possible Positive Outcomes:

--The question, "What is a high school education?" must be squarely faced.

--The statements required for each course will likely result in carefully organized teaching and carefully designed sequential learning.

--Slow learners and underachievers will likely receive direct and immediate attention.

--Courses of study will likely be revised to correct identified deficiencies.

--Subjects leading to the development of competencies will receive additional emphasis.

--Alternatives and options not requiring attendance in class will likely be broadened.

--The senior year may gain more holding power because of a new focus upon requirements and options.

--The community will know the minimum performance required in specific subject areas for the diploma.

Possible Negative Outcomes

--Confusion over the meaning of a high school diploma will continue if each district identifies its own level of competencies and performance indicators.

--The emphasis on pragmatic and practical competencies may result in erosion of liberal education.

--The emphasis on measurable outcomes could result in less attention to outcomes which are difficult to measure.

--The record-keeping system could become burdensome to teachers and administrators.

--The conflict between "humaneness" and "accountability" may be intensified as criteria are established and clarified.

--Community disagreement may arise over the nature and difficulty of competencies.

--Dropouts could increase depending upon the level of minimum competencies.

--Expectations for an improved product could exceed actual performance.

Irrespective of one's position with relationship to minimum competency requirements for high school graduates, there are indications of attempts being made to guarantee the validity of a high school diploma by utilizing competency measures. Frahm and Covington (1979) stated that initially

minimum competency testing was known as a competency-based high school graduation testing program. However, since 1976, the system has evolved to include a testing system providing early warning for those students needing remedial assistance. The authors' interest in the minimum competency movement led to an extensive study, through visiting states and local school districts, of minimum competency testing.

Pipho (1977) reviewed states which were initiating minimum competency programs and described legislation and state department of education activity with respect to competency programs. De Leonibus (1979) compiled a summary of competency testing in the fifty states for the National Association of Secondary School Principals.

A discussion of competency requirements and competency testing in selected areas follows:

One of the forerunners in the field of competency testing has been the Denver Public Schools. Thompson(1978) indicated that for eighteen years, demonstrated proficiency in reading, mathematics, spelling and grammar has been a requirement for graduation.

Tests are intially administered to ninth grade students. Remedial programs are then required for anyone with deficiencies. Retesting takes place in the tenth and eleventh grades following remediation. According to Keefe and De Leonibus (1979), only one and one-half percent of a graduating class fall below the minimum level of competence on one or more of the tests, and those students are awarded attendance cer-

tificates if the attendance requirement has been fulfilled.

Beal (1978) described innumerable opportunities for success following failure of tests. Make-up exams are given twice a year in grades ten and eleven plus additional administrations in twelfth grade if desired. Notification of a student's standing on all four subjects is given to parents twice a year. Twelfth graders who are successful may attend summer school classes for remediation. Those students receiving only certificates of attendance may return at any time and retake tests.

The Westside Community School Board in Omaha, Nebraska, was another of the early proponents of minimum competency requirements for graduation. Keefe and De Leonibus (1979) indicated that in 1974, requirements were adopted which combined course work with the demonstration of minimum competency in seven areas: reading, writing, oral communication, mathematics, consumerism, the democratic process, and problem solving.

The competency tests are administered at various times throughout the first three years of high school. Mathematics and reading tests are given in ninth grade, with the re-administration of the mathematics tests in eleventh grade. In sophomore year, written and oral communications tests and a consumer competency test are administered. As juniors, students are tested regarding the democratic process. Problem solving ability is evaluated in the U.S. History class during the second semester of junior year.

Frahm and Covington (1979) described the program in Omaha as a strong program which grew from within. The main benefit is the help provided for the struggling student. Failure to demonstrate competency at first testing is indicative of remedial needs, which are then accommodated until proficiency in a specific subject area is developed.

Substitution of experiences and competencies for Carnegie units and attendance requirements is evident at the St. Paul Open School in St. Paul, Minnesota. Nathan and Jennings (1978) explained how the program evolved and the student requirements. A special committee composed of students, parents, staff, and community members were asked to define skills a high school graduate should possess. The resultant expectations for high school graduates were that they be able to carry out directions and accept responsibility, communicate orally and in writing, and compute. Six competency areas were identified, namely, career awareness, consumer awareness, current issues, community involvement, information finding, and personal/interpersonal skills.

Graduation requirements include the compilation of a packet describing how that student demonstrated skills in the competency areas. In addition, each student must pass a math test and write a summary of the last three years of education which is grammatically accurate. The graduate packet is reviewed by a committee and the student is recommended for graduation (Frahm and Covington, 1979).

Henderson (1978) discussed the policy, approved by the Gary, Indiana Board of School Trustees in 1974, which required demonstrated proficiency in reading, mathematics, and both oral and written communication. Requirements for reading and math proficiency became effective in 1977, written communication in 1978, and oral communication in 1980.

In their description of the Bakersfield program, Frahm and Covington (1979) indicated that benefits of the program include new remedial math and reading programs, better identification of slow students and clearer course goals. However the study of test data left officials unsure if graduates do better in reading, writing and math.

A statewide assessment program described by Fisher (1978) was undertaken in Florida to determine the functional literacy and basic skill mastery of all eleventh grade students. The basic skill assessment was used as a preliminary screening device followed by remediation for those needing assistance as mandated by the 1976 Education Accountability Act of Florida.

The test of functional literacy is an application of basic skills to everyday life situations and problems. Failure to pass the test in four trials results in a certificate of attendance rather than a high school diploma.

School districts in other states have also made a high school diploma contingent upon the successful demonstration of minimum competencies in specific areas. Norris (1978) indicated that the Oregon State Board of Education adopted

graduation requirements beginning with the class of 1978 which are based on functional competence in one's role as individual, learner, producer, citizen, consumer, and family member.

Impetus for the survival skills curriculum in Oregon was provided by Dale Parnell, a staunch advocate of competency-based education. Parnell (1978:18) characterized competency-based education as a "learner-centered philosophy, a policy demand, which is real-life oriented, flexible, and has clearly articulated standards."

Recognizing the need to provide some synthesis to high school competency requirements, the Competency-Based Education Program of the Northeast Regional Educational Laboratory sponsored a study which, among other things, resulted in the development of 77 graduate competency statements. These statements were derived from an analysis of student outome statements which have been adopted as graduate requirements in a variety of school districts. Schenk (1979:15) indicated that the competency statements "reflect a preference toward general competencies rather than specific ones. This is due to the CBE Program's belief that communication and instructional flexibility are important aspects of competency-based education." A list of the short form of the competency statements and topic areas follows:

Communication

Read newspapers and magazines.
Follow written directions.
Use reference materials.
Summarize oral content.
Summarize audiovisual content.
Follow oral directions.
Write letters.
Give written directions.
Ask and answer questions.
Give oral directions.

Computation

Use four basic operations.
Use ratios, proportions and percents.
Use formulas.
Estimate solutions.
Order magnitude of measures.
Convert measurement units.
Use measurement devices.
Interpret charts and graphs.

Technology

Use a calculator.
Use simple machines.
Substitute sources of energy.
Reduce energy use.
Reduce environmental pollution.
Operate an automobile.
Interpret traffic control devices.

Health

Plan balanced meals.
Identify drug abuse effects.
Develop exercise program.
Develop recreational program.
Detect common illnesses.
Treat common illnesses.
Locate medical facilities.
Apply first aid.
Employ safety measures.
Recognize potential hazards.
Obtain emergency assistance.
Locate community resources.
Cope with conflict.
Maintain dental health.
Interpret drug labels.
Interpret danger symbols.

Citizenship

Interpret resource guides.
Locate government services.
Recognize violations of rights.
Employ voting procedures.
Influence government decisions.
Complete government forms.
Interpret legal materials.
Interpret permit requirements.

Consumer

Construct a budget.
Use types of money.
Keep financial records.
Prepare tax forms.
Maintain bank accounts.
Select insurance.
Complete insurance forms.
Determine financial responsibilities.
Determine legal contractual requirements.
Apply for credit.
Determine credit costs.
Identify credit violations.
Compare products and services.
Interpret product guarantees.
Use consumer publications.
Evaluate advertising techniques.
Obtain consumer assistance.

Career

Identify possible occupations.
Determine occupational requirements.
Determine occupational characteristics.
Obtain information about jobs.
Complete job applications.
Participate in job interviews.
Determine employer procedures.
Determine work safety procedures.
Prepare a resume.
Write application letters.
Determine wages and benefits.

While it is apparent that competency requirements are flourishing in some areas, the future of the movement is not altogether predictable. According to Pipho (1978) who has observed the action in its developmental stages, the minimum competency movement, regarded by many as the hope

for education, snowballed from 1975 to 1977 as state legislatures introduced, passed, and reviewed related legislation. However, in an end of the year summary, Bordinsky (1979) reported that the action has diminished during the past year as educational financing demands cutbacks and as legal action and negative reaction to student failure surfaced.

Summary

A review of the literature concerning competency requirements for high school graduation reveals that, despite divergent views concerning the merits of minimum competency requirements, the specification of such requirements has been utilized by some schools to enhance the validity of a high school diploma. In addition to certifying that graduates are competent in certain areas, the competency movement has proved to be beneficial in the early detection of academic problems and thereby provides a mechanism for remediation.

Emphasis on both basic skills and life coping skills appeared to be evident in many systems utilizing minimum competency requirements. This combination is similar to competency requirements for the EHSDP and other adult competency-based high school programs.

Chapter III

Methodology

Introduction

This chapter presents a description of the methodology utilized in conducting the competency comparison study of the External High School Diploma Program.

Description of the Population

The population for this study consisted of knowledgeable persons from whom information concerning competency requirements for high school graduation could be obtained. Specifically, initial contact persons were (1) administrators in each of the 12 school districts contained in the Waukesha County Area Vocational, Technical, and Adult Education (WCTI-VTAE) district, and (2) Chief State School Officers in each of the 50 states.

Data Collection

The twelve local schooldistricts* within the WCTI-VTAE district were contacted by telephone during March, 1980. Of these twelve districts, eleven administrators responded to the request for information concerning minimum competency requirements for high school graduation.

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* The survey of local districts in Wisconsin was limited to these twelve districts since the EHSDP currently serves only those individuals who reside within the district boundaries of WCTI. At the present time, three of the twelve local school districts are awarding the External High School Diploma.

(Table 1 presents data concerning the number and percent of response.) Although only one district indicated that specific competencies were required for graduation, four districts supplied information concerning tests currently being utilized.

On March 14, 1980, letters, which requested information concerning minimum competency requirements for high school graduation, were sent to Chief State School Officers in the fifty states.

The possibility of devising a questionnaire based upon the 64 competencies required for graduation from the EHSDP was considered; however, this was rejected in favor of a more open ended approach which would yield a greater diversity of responses. Consequently, each respondent was asked to forward a description of the competencies required for high school graduation in that particular state. A copy of the letter to Chief State School Officers appears in Appendix A.

Thirty-four (68%) of the School Officers or their representatives responded to the initial request for information.

On April 16, 1980, a follow-up letter was sent to those individuals who had not responded to the earlier request. This letter (Appendix B) prompted fourteen responses for a total response rate of 96%. Table 2 indicates that two states were not represented in the survey.

Responses indicated that not all states had minimum

Table 1

Number and Percent of Responses
for Local School Districts in WCTI-VTAE District

	Number	Percent
Responses	11	91.67%
No Response	1	8.33%
TOTAL	12	100.00%

Table 2

Number and Percent of Responses
from Chief State School Officers

	Number	Percent
Responses	48	96%
No Response	2	4%
TOTAL	50	100%

competency requirements for high school graduation. Respondents representing the twenty-four states which had such requirements, or which were in the process of developing competency requirements, were most helpful in providing information concerning the competency requirements.

Following the collection of data, the competency requirements for high school graduation in various local districts and states were reviewed. The competencies required in the External High School Diploma Program were then compared with composite competencies of the states.

Chapter IV

Analysis of Data

Introduction

The analysis of data is divided into components dealing with the identification of minimum competency requirements for high school graduation within local school districts in the Waukesha County Technical Institute (WCTI) district and various states, and the comparison of these competencies with those required by the External High School Diploma Program (EHSDP) at WCTI.

Since the purpose of this study was to compare EHSDP competencies at WCTI with minimum high school competency requirements in local school districts within the WCTI district and selected states, an overview of EHSDP competencies will precede the analysis of data.

In order for an individual to be awarded an External High School Diploma, mastery of 64 generalized competencies and one individualized competency (reflecting either an occupation, advanced academic, or special skill area) must be demonstrated. Due to the highly individualized nature of the individual competency, only the 64 generalized competencies will be utilized for comparison purposes. All of the competencies are based upon the ability to function in adult life roles.

The following generalized competency areas (which are based on the New York States EHSDP competencies) provide the framework for the 64 competencies:

(1) Communication, including competencies related to reading, listening, viewing, and writing;

(2) Computation, composed of addition, subtraction, division, decimals, fractions, computation of area, and interpretation of graphs;

(3) Self-Awareness, which contains competencies related to Decision Making, Aesthetic Expression, and Health and Safety.

(4) Social Awareness, including awareness and utilization of community resources, rights and responsibilities of citizenship and functioning within a group;

(5) Consumer Awareness provides for demonstration of competence in comparative shopping, sources of consumer information, and initiating the process for registering consumer complaint;

(6) Scientific Awareness, related to competencies such as solving equations, converting measurements and classifying information; and

(7) Occupational Preparedness, related to identification of vocational interests and aptitudes, comparison of occupations, and preparation of portfolio for job application.

A complete listing of all 64 competencies is contained in Appendix C.

High School Competency Requirements for Local School Districts within Waukesha County Technical Institute District Boundaries

Wisconsin has no statewide regulation pertaining to minimum competency requirements for high school graduation. The initiation of such a requirement is the prerogative of the local educational agency. A statewide pupil assessment program is available to those districts desiring to

utilize it.

Currently, very little competency testing for high school graduation is being conducted by the local high schools contained within the district boundaries of Waukesha County Technical Institute. However, a variety of standardized tests are being administered to determine performance levels. A brief description of the assessment procedures in the schools awarding the External High School Diploma and the school utilizing competency testing follows:

Menomonee Falls district, which is one of the districts awarding the External High School Diploma does administer the Adult Performance Level Competency Exam in the junior year. The competencies in this exam are related to content areas of Community Resources, Occupational Knowledge, Consumer Economics, Health, Government and Law. The APL survey also focuses on skills such as identification of facts and terms, reading, writing, computation, and problem solving. At the present time, the APL survey is utilized for assessment purposes rather than to determine competence relative to high school graduation.

New Berlin conducts competency testing in mathematics, reading and writing in grade school, 9th grade, and 10th grade. Starting in 1981, students who have not demonstrated competency in these areas by the end of the senior year, may not graduate.

Oconomowoc, another district awarding the External High School Diploma conducts basic skills testing, academic and aptitude testing in 3rd, 6th, 9th and 12 grade.

Pewaukee School District, which also awards the External High School Diploma administers the STEP test.

Competencies contained in the EHSDP focus on functional life skills which are similar to the Adult Performance Level Survey administered by Menomonee Falls. EHSDP competencies related to mathematics are contained in the area of Computation, while reading and writing competencies competencies are contained in the Communications area.

High School Competency Requirements by State

An overview of competencies is presented for those states which identified statewide minimum competency requirements for high school graduation. This section also includes a discussion of competencies which have been identified but are not necessarily mandatory for high school graduation. Those states which are not identified either had no specific statewide competency requirements or competency statements were unavailable. Two states are absent due to non-response.

Alabama

The state of Alabama is not yet testing students for graduation; however, competencies for statewide use in Reading, Mathematics and Language have been identified. Check point testing of competencies occurs at the third, sixth, and ninth grade levels. Standards, Competencies, and Examples have been published in Minimum Standards and Competencies (Reading, Language, Mathematics for Alabama Schools). The standards for grade nine are as follows:

Reading

1. The student will acquire a basic survival reading vocabulary.
2. The student will determine word meaning from the way the word is used.
3. The student will determine word meaning from a knowledge of word parts.
4. The student will locate materials and read for community/economic/occupational survival.

5. The student will read and follow directions/ instructions.

Language

1. The student will write various types of sentences which are grammatically correct.
2. The student will arrange sentences in logical order.
3. The student will write a paragraph expressing ideas clearly.
4. The student will write for the purpose of supplying information.
5. The student will write personal and business letters.
6. The student will fill out common forms.
7. The student will punctuate correctly.
8. The student will spell correctly.

Mathematics*

1. The student will perform computation tasks in addition, subtraction, multiplication, and division.
2. The student will perform measurement tasks utilizing both customary (English) and metric systems.
3. The student will read and interpret tables, charts, graphs, maps, and scale drawings.
4. The student will make estimations and approximations and will recognize reasonableness of results.
5. The student will recognize geometric forms and concepts.
6. The student will apply mathematics to everyday consumer situations.

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* Standards are similar for all grades (3-9). Level of competency at 9th involves application to life problems such as taxes, wages and deductions, advertising, etc.

Arizona

Arizona does have a system of competency based education; however, the focus for the identification of testing for these competencies is the local district rather than the state. Each district is required to set up such standards.

California

The California Education Code requires local districts to assess pupil progress in at least three basic skills areas (reading comprehension, writing, and computation). Assessments must be conducted at least once in grades four through six, once in grades seven through nine, and twice in grades ten through eleven. After June, 1980, no student will receive a high school diploma unless he/she has met standards of proficiency in the basic skills as adopted by the local governing board. There is no statewide competency test in California. Each local district sets its own standards and designs or selects its own assessment procedures.

The California Department of Education does administer the California High School Proficiency Examination (CHSPE), which is open to anyone sixteen years of age or older, or a second semester sophomore. Anyone passing the exam receives a certificate of proficiency which is, by law, the equivalent of a high school diploma.

The CHSPE is designed to verify basic skills--language use, computation/quantification, and reasoning. Questions on the exam reflect elements of the standard curriculum and

everyday situations. The minimum passing score is set at the average performance level of second semester twelfth graders. A statewide educational assessment program (CAP) is conducted annually in grades one, three, six, and twelve. Reading, spelling, written expression, and mathematics are tested in the upper grades.

Delaware

The Delaware State Board of Education, in 1977, approved the policy that the appropriate level of performance in Reading, Writing, and Mathematics necessary for high school graduation be established to become effective with the graduation class of 1981. The performance requirements are to be incorporated by the local school districts into their curricula. Both performance requirements and performance indicators have been identified. Minimal performance requirements are as follows:

Reading

1. Use basic word recognition techniques.
2. Comprehend the literal meaning of a passage.
3. Demonstrate the ability to understand relationships, draw conclusions, and make inferences.
4. Use appropriate reference skills.

Writing

1. Write complete sentences.
2. Write a well-developed paragraph.
3. Prepare written messages and announcements.
4. Write business and social letters.

5. Complete commonly-used forms.
6. Use the English language correctly.
7. Spell frequently-used words.
8. Write legibly in manuscript or cursive form.

Mathematics

1. Use numbers and numeration concepts appropriately.
2. Perform appropriate computation skills with numbers, fractions, and decimals, including problem solving situations.
3. Apply measurement concepts and recognize common geometric properties of figures.
4. Interpret graphs, tables, and statistics in appropriate situations.
5. Use estimation and approximation in practical problem solving situations.

Florida

In the state of Florida, the standards identified for beginning grade 11 are the competencies required for graduation. These standards are in the areas of reading, writing, and mathematics. In addition, Florida will require, in 1982,that students pass a test designed to measure their ability to successfully apply basic skills to everyday life situations, including functional communicational skills and functional mathematics skills.

Functional literacy in Florida is defined as "the satisfactory application of basic skills in reading, writing, and mathematics to problems and tasks of a practical nature as encountered in everyday life." (Minimum Student Performance Standards for Florida Schools 1977-78, 1978-79, 1979-

80, p. iv.)

Reading Standards, Writing Standards, and Mathematics Standards for beginning grade 11 are as follows:

Reading Standards

1. The student will acquire a basic vocabulary as determined by a specified word list.
2. The student will determine word meaning from the way the word is used in a passage.
3. The student will determine word meaning from a knowledge of word parts as used in a given context.
4. The student will determine whether different selections have similar meanings.
5. The student will determine the main idea of a message.
6. The student will find information in a message.
7. The student will determine the causes and effects of events and actions.
8. The student will determine the logical generalizations which can be drawn from a message.
9. The student will recognize fantasy, fact, and opinion in a message.
10. The student will recognize irrelevant and invalid statements.
11. The student will follow oral and written directions.
12. The student will identify appropriate sources for needed information.
13. The student will use appropriate reference skills.

Writing Standards

1. The student will compose grammatically correct sentences.

2. The student will organize objects and information into logical groupings and orders.

3. The student will write a paragraph expressing ideas clearly.

4. The student will write for the purpose of supplying necessary information.

5. The student will write letters and messages using commonly accepted formats.

6. The student will fill out common forms.

7. The student will spell correctly.

8. The student will punctuate correctly.

9. The student will capitalize correctly.

10. The student will write legibly.

Mathematics

1. The student will count quantities.

2. The student will read and write numerals.

3. The student will round numbers.

4. The student will put numbers in order.

5. The student will determine equivalent forms of fractions, decimals, and percents.

6. The student will add whole numbers.

7. The student will subtract whole numbers.

8. The student will multiply whole numbers.

9. The student will divide whole numbers.

10. The student will add and subtract fractions.

11. The student will multiply fractions.

12. The student will add and subtract decimals.

13. The student will multiply and divide decimals.

14. The student will find percentages.

15. The student will measure time, temperature, distance, capacity, and weight.

16. The student will identify geometric figures and shapes.

17. The student will identify the value of coins and bills.

18. The student will determine the information needed to solve a problem.

19. The student will estimate solutions by rounding.

20. The student will solve real-world problems involving whole numbers.

21. The student will solve real-world problems involving fractions, decimals, and percents.

22. The student will solve money problems.

23. The student will solve measurement problems using metric and customary units.

24. The student will interpret graphs, tables, and maps.

Georgia

Competency based graduation criteria are now being field-tested by pilot school systems and will be incorporated into state requirements by 1983. There are five competency areas:

(1) Learner - competence in areas of reading, writing, mathematics, speaking and listening, and problem solving.

a. Indicators of reading competence include such skills as identifying main ideas and details, interpreting literal and figurative language, and using reference resources.

b. Indicators of writing include such skills as composing sentences, organizing information, and writing paragraphs.

c. Indicators illustrative of skills in mathematics include translating numbers, computing

percentages, and applying arithmetic operations.

d. Indicators of speaking and listening may include interpreting aural communications, composing oral directions and questions, and using formal and informal speaking styles.

e. Problem solving includes interpreting a variety of data, inferring cause and effect and applying logical reasoning to the identification and solution of problems.

(2) Individual - competencies necessary to improve both physical and mental health.

a. The student recognizes and practices sound personal health habits necessary to maintain physical and mental health; and, demonstrates preventive and emergency actions for health and safety.

b. The student recognizes the value of cultural arts and the humanities, and the use of personal leisure activities in contributing to his/her physical, mental, and emotional well-being.

c. The student understands the sound health care principles involved in family living, parenting, and parenthood.

(3) Citizen - competencies needed to function as a responsible member of society.

a. understanding the basic structure and functions of the American system of government and the American economic system.

b. knowing basic legal rights and responsibilities of the citizen under the American judicial and penal systems.

c. recognizing relationships between current societal and environmental problems and the individual's role and responsibilities.

(4) Consumer - competencies needed to function as an informed consumer.

a. the student knows the principles of sound personal financial planning and management.

b. The student identifies the legal rights and responsibilities of the consumer in buying and selling goods and services.

(5) Producer - competencies needed to select and pursue a career reflecting personal interests and abilities.

a. The student analyzes personal career opportunities and choices in career planning and management.

b. The student demonstrates the skills necessary to obtain employment. (High School Graduation Requirements Policy)

Hawaii

Hawaii has 15 essential competencies required for graduation (effective with the class of 1983):

(1) Read and use printed materials from daily life.

(2) Complete commonly used forms.

(3) Demonstrate writing skills commonly used in daily life.

(4) Communicate orally in situations common to everyday life.

(5) Use computational skills in situations common to everyday life.

(6) Read and use scales on standard measuring devices.

(7) Interpret common visual symbols.

(8) Reach reasoned solutions to commonly encountered problems.

(9) Distinguish fact from opinion in TV and radio news broadcasts, advertising, newspaper and magazine articles, and public speeches.

(10) Use resources for independent learning.

(11) Identify the harmful effects of smoking, drinking, drug abuse, overeating, insufficient sleep, poor personal hygiene, and poor nutrition.

(12) Identify the training, skill and background requirements of at least one occupation in which the student is interested.

(13) Demonstrate knowledge of the basic structure and functions of national, state and local governments.

(14) Demonstrate knowledge of the citizen's opportunities to participate in political processes.

(15) Demonstrate knowledge of important citizen rights and responsibilities. (Graduation Requirements)

Idaho

The Idaho State Department of Education adopted a proficiency testing program for Idaho Public School in 1977; the proficiency test was available on a district-optional basis in April, 1979. The intent of the test is to provide students with an opportunity to demonstrate their competency in the basic skill areas of reading, spelling, writing and mathematics. It is also intended to identify any areas of weakness or deficiency that should be remediated prior to the student's graduation.

Basic proficiences, as outlined in Idaho Proficiency Testing Program, are as follows:

Basic Proficiencies in Reading

Comprehension Skills

The student should be able to:

1. follow a set of stated directions.
2. locate relevant information by selecting facts/details.
3. use context to determine word meaning.
4. identify sequence of events.
5. perceive cause/effect relationships.
6. distinguish between fact and opinion.
7. make inferences and draw conclusions.
8. use punctuation and grammar clues as an aid to gaining meaning.

9. recognize the main idea.
10. make comparisons and contrasts based on information given in passages.
11. make classifications and lists.

Study Skills

The student should be able to:

12. use reference skills as applied to parts of books.
13. use reference skills as applied to reference documents.
14. use reference skills as applied to practical documents.
15. interpret maps and diagrams.

Basic Proficiencies in Writing and Spelling

(1) The student will organize material by:

a. choosing a position.
b. maintaining a position.
c. providing information (evidence, reasons, facts, examples, proofs, experiences).
d. reaching a conclusion.

(2) The student should be able to meet the specific demands of a writing task by:

a. using appropriate vocabulary.
b. following directions of the assignment.
c. observing the format required.

(3) The student will use the mechanics of written English by:

a. punctuating appropriately (including capitalization and indentation).
b. writing complete and correct sentences.
c. writing legibly.

(4) The student should be able to spell correctly. The words will be chosen from the Dolch list of the 1000 most frequently used words.

Basic Proficiencies in Math

Mathematics Competencies

The student should be able to:

1. add two fractions having unlike denominators.
2. multiply and divide any two decimals with no more than two decimal places.
3. add and subtract decimal numbers having no more than two decimal places when given in vertical or horizontal format.
4. multiply any two fractions or a fraction and a whole number.
5. select equivalent fractions from a list of fractions.
6. change a percentage to an equivalent decimal form or a decimal to a percentage.
7. change a common fraction to a decimal form.
8. add any three whole numbers up to four digits long.
9. subtract any two whole numbers up to five digits long.
10. multiply any two whole numbers up to three digits long.
11. divide any whole number by a one or two digit whole number divisor and write a remainder (if any) as a proper fraction.

Mathematics Application

The student should be able to:

12. select appropriate metric units for length, volume (capacity), and weight (mass).
13. convert from one unit of measure to another within the conventional or metric system.
14. recognize horizontal, parallel, perpendicular, vertical, and diagonal lines.
15. recognize a triangle, rectangle, square, parallelogram, or circle.
16. compute perimetes and area of simple polygons.
17. solve simple written (story) problems, the solution which will require at least one of the four fundamental operations with whole numbers.
18. find the average of up to five two digit numbers.
19. solve written problems, the solution to to which will require addition or multiplication of fractions.
20. solve a written problem involving a percent of a whole number.

21. solve a simple problem involving proportional parts.
22. solve a simple problem involving time.
23. keep a bank record with simple deposits and withdrawals.
24. compute his/her salary based on number of hours employed and salary per hour.
25. determine the solutions to real world problems involving purchases totaling less than ten dollars with change from a twenty dollar bill.
26. substitute given values into either a formula or equation and obtain the correct result.

Indiana

The state of Indiana does not prescribe a set of competencies which are required for high school graduation. The state mandates, however, that each local district must set standards, and engage in program planning and assessment in the areas of reading, language arts and spelling, social studies, mathematics, and science. It is the option of the local school district whether or not to test these competencies as a requirement for graduation.

Louisiana

The Louisiana Department of Education has identified competencies for high school graduation, but they are not yet required. Minimum competencies are in the areas of Reading, Writing and Mathematics. Minimum competencies are presented in the context of real life situations with performance indicators being specified.

Life situations in the areas of Reading include: planning a trip, using community resources, following directions, using product manual and labels, and using

advertisements.

Life situations in writing are related to items such as describing a car accident for an insurance report, applying for social security number, driver's license, voter registration, and differientiating among what is required, requested and demanded.

Mathematics life situations include balancing a checkbook, commission selling, budgeting, planning and taking a trip.

Examples of minimum competencies, as outlined in Louisiana Twelfth Grade Competencies follow:

Reading Minimum Competencies

1. Locates and uses information in atlas, maps, and globes.
2. Predicts outcomes.
3. Extracts literal meaning of words, phrases, sentences, and paragraphs.
4. Identifies sequence of events, time, and order.
5. Extracts and applies correct meaning.
6. Applies literal meaning of words, phrases, sentences and paragraphs.
7. Identifies cause and effect relationships.
8. Distinguishes fact from opinion.
9. Identifies propaganda and bias.
10. Identifies main idea.
11. Identifies supporting details.
12. Vocabulary.

Writing Minimum Competencies

Minimum competencies are related to

I. Types of Writing
   a. Description
   b. Narration
   c. Exposition
      1. Definition and classification
      2. Process
   d. Persuasion

II. Organization

III. Proofreading
   a. Language structure
   b. Punctuation
   c. Capitalization
   d. Spelling

Mathematics Minimum Competencies

(1) Numeration - read and write numbers, round numbers.

(2) Whole numbers - add, subtract, multiply, divide, check division.

(3) Fractions - add, subtract, multiply, divide.

(4) Decimals - read and write decimals, add, subtract, multiply.

(5) Measurement.

(6) Percent

(7) Problem Solving

Massachusetts

The Massachusetts Board of Education has passed a basic policy along with regulations, but graduation standards are left to local school districts.

The secondary level minimum standards include basic skills objectives in the areas of Reading, Writing, Listening, Speaking and Mathematics: (Basic Skills Improvement

Policy and Regulations)

(1) Reading
   a. Basic Word Meaning
   b. Literal Comprehension
   c. Interpretative Comprehension
   d. Evaluative Comprehension
   e. Locating Information

(2) Writing
   a. Knowledge of the subject
   b. Clear and consistent purpose
   c. Organization
   d. An awareness of the intended reader
   e. Precise word choices
   f. Fulfillment of the purpose
   g. Correct capitalization and punctuation
   h. Correct spelling
   i. Legible handwriting
   j. Complete sentences
   k. Standard use of nouns, pronouns, verbs, adjectives, and adverbs
   l. Agreement of subject and verb

(3) Listening
   a. Basic listening skills
   b. Understanding what you hear
   c. Using what you hear

(4) Speaking
   a. Basic oral communication skills
   b. Planning, developing, and stating spoken messages
   c. Common uses of spoken messages

(5) Mathematics
   a. Number and numeration concepts
   b. Arithmetic Computation - add, subtract, multiply, decimals, fractions, percent, ratio
   c. Estimation and approximation
   d. Measurement and geometry
   e. Graphs and tables
   f. Prediction of events and statistics - probabilities; find mean and median for a group of numbers

Michigan

Michigan does not have state dictated competencies required for graduation. Specific life role competencies, however, have been developed which are being incorporated

through high school programs at all levels including adult high school completion. Documents related to each of the life roles have been prepared and specify competencies, components, performance objectives, as well as supportive evaluation methods (Michigan Life Role Competencies).

The four life role competencies include:

(1) Employability and Occupational Skills: This life role area is intended to help students explore, select, prepare for and gain needed skills and understandings to begin successfully the occuption experiences of their adult lives.

(2) Personal and Family Management: This area covers skills necessary for achieving a rational and satisfying personal and family life. It includes skills and understandings needed for personal satisfaction and successful family living and recognizes a growing awareness and understanding of the ways individuals experience their lives personally and as family members.

(3) Civic and Social Responsibilities: The specific competencies for this area are designed to help prepare students for responsible entry into the adult world of civic and social activity.

(4) Aesthetic and Humanistic Appreciations: This area encompasses the creative dimensions of life and includes a variety of leisure activities. The competencies are designed to help students develop their capacities for the exploration of their world, to sharpen and expand their perceptions, and to understand with greater clarity the

significance of their lives.

Nevada

Nevada has developed minimum competency statements in the areas of Reading, Writing and Mathematics which are the basis for high school proficiency examinations.

Minimum competencies in the area of Reading are contained in three skill group areas: (I) Comprehension (cause and effect, identifying conclusions, distinguishing fact from opinion); (II) Order and Sequence (time relationship, alphabetizing, following directions); and (III) Reference Skills (locating and using appropriate references sources).

Minimum competency in Writing for high school graduation is the ability to demonstrate those specific skills necessary for clear, purposeful communication. Competency is demonstrated in the writing of an expository paragraph and business letter.

In the area of Mathematics, minimum competency is the ability to use addition, subtraction, multiplication, division and practical problem-solving skills. Specific skills are to add money, add fractions, subtract money, subtract fractions, multiply money, multiply fractions, divide money, use percent, find perimeter and area, translate words--numbers, make change, identify time and date, use units of measure, compare numbers and use tables and graphs.

New Jersey

The only competencies specifically required at the state level are in the areas of basic skills. Basic skills competencies, which are required and tested at the ninth grade level are described in New Jersey Minimum Basic Skills Testing Program. Remedial procedures are provided to those students with identified deficiences. Specific basic skills are related to Reading (including word recognition, reading comprehension, study skills) and Mathematics (computation, number concepts, measurement and geometry, and problem solving).

New Mexico

New Mexico conducts minimum competency testing in the tenth grade, with remediation and repeat testing in later grades for those who do not pass the examination. Successful completion of the test is required to receive an endorsement on high school diplomas. The New Mexico Basic Skills Plan is based on the Adult Performance Level Examination, with additional questions developed by local educational leaders. Five content areas are tested: Community Resources, Occupational Knowledge, Consumer Economics, Health, and Government and Law. The New Mexico Proficiency Examination also included a writing assessment. Skills used for the writing appraisal include:

(1) Convey written information in a manner that is legible to the reader;

(2) apply spelling and syllabication rules to spell or abbreviate correctly in written composition;

(3) apply standard use of language mechanics;

(4) select language appropriate for the intended purpose and audience;

(5) write with complete sentences using acceptable grammatical patterns;

(6) use the elements associated with paragraph construction using a topic sentence supported and developed by other sentences;

(7) demonstrate cohesiveness in a multiparagraph composition; and

(8) appropriately organize materials for the subject, purpose and audience.

A set of life competencies in the are of reading, writing, and mathematics has been adopted by the Superintendent's Basic Skills Task Force. Life competencies related to Mathematics focus on time, distance, interest, discount, money, budget, cost analysis, filling out forms, taxes, insurance, checking account, loans and measurement.

Fifty-two Reading/Writing life competencies have been identified, including items such as read and comprehend a driver's instructional manual; identify the procedure that should be followed to prepare a product given a recipe on a label or package; differentiate between fact and opinion; list possible questions to ask a prospective employer about a specific job; and compute a W-4 Employee's Withholding Exemption Certificate.

New York

New York State's competency testing program has two major emphases: (1) establishing standards of proficiency in the basic skills for the high school diploma; and, (2) providing remedial instruction to students who need special help. The specific competencies fall into three categories: Reading Comprehension, Writing, and Mathematics.

The Reading Comprehension area consists of word selection for insertion into a prose passage, thereby showing their (a) understanding of the meaning within individual sentences; and, (b) ability to derive meaning from connected prose text.

The Writing Area asks students to demonstrate a satisfactory level of language skills by writing a business letter, data report, and a persuasive essay.

The Mathematics Area consists of questions involving integers, rational numbers, graphing, geometric figures, probability, and statistics, ratio, proportion and percent, consumer and job-related mathematics.

A score of 65% in each of the three areas represents a minimum level of achievement for satisfactory completion of the tests (Minimum Competency Testing of the State of New York).

North Carolina

The state of North Carolina requires that all students pass a minimum competency test to graduate. Competencies

are stated in the form of objectives and performance indicators are identified (North Carolina Competency Objectives and Performance Indicators).

The reading objectives specify that the learner will:

(1) demonstrate word knowledge and use of contextual clues;

(2) read and follow directions;

(3) read and select the main idea and related detail;

(4) read and classify information;

(5) read and draw inferences from various reading materials;

(6) read and draw conclusions;

(7) compare and contrast various reading materials;

(8) read and organize information using various types of materials;

(9) locate and apply information;

(10) interpret maps, legends, charts and pictures.

The mathematics objectives specify that the student will be able to:

(1) compute using whole numbers;

(2) compute using fractions;

(3) compute using decimals;

(4) compute using percents;

(5) solve problems involving money matters;

(6) solve problems involving measurement;

(7) use geometric ideas in solving every day problems;

(8) read, interpret, and use maps;

(9) apply knowledge of probability and statistics to everyday situations;

(10) estimate answers to problems;

(11) solve problems involving computations with whole numbers, fractions, decimals, and percents.

Oregon

Demonstration of competence in Reading, Writing, Mathematics, Speaking, Listening, and Reasoning are included in Oregon's graduation requirements, along with specific course/credit requirements. Student competence is verified through measurement or by the application of skills and knowledge in courses. The Oregon Department of Education is developing a list of competencies, performance indicators, measures and standards which districts may use or modify to develop their own basic lists in the six competency areas listed above.

The Oregon State Board, while emphasizing competence in life role responsibilities, indicates that "experience has shown that competence in citizenship, health, career education, and scientific processes is most appropriately taught in required and elective courses" (Oregon Department of Education, 1980:5).

Pennsylvania

The state of Pennsylvania is currently involved in a pilot project which is looking into the implications of setting minimum competency requirements for high school graduation. Some of the competencies will be state graduation requirements, while others may be required by local districts. Tentatively, competencies will deal with four

major areas of life: civic, work, home, and leisure.

Rhode Island

Schools and Skills, a booklet published by the Rhode Island Department of Education, states that there are three essential life skills that students should be able to do by the time they are legally allowed to leave school: (1) Comprehend, (2) Analyze, and (3) Evaluate--facts, observations, feelings, symbols, concepts, and processes.

Twenty-two tasks are included in the "Comprehend" skills area. The tasks contain reading, listening, and understanding skills in the areas of government, citizen rights, art, nutrition, health, consumerism, and identifying discrimination.

The "Analyze" skill area has 32 tasks, including job-seeking skills, logic, writing skills, completing forms, identifying social problems/solutions, fact/fantasy, stereotyping, art, politics, environment, health, and calculating everyday math problems.

Nineteen tasks constitute the "Evaluate" skills area. These tasks contain written descriptions of behavior, factual information, community or personal situations, etc., and ask the student to identify specific aspects of the description.

South Carolina

The state of South Carolina does not require a minimum competency exam for graduation. They have, however,

developed a Basic Skills Program for diagnostic-presriptive purposes for grades K-12. The subject areas included are Reading, Writing, and Mathematics.

Objectives in the Reading section for grades 9-12 are the use and understanding of: (1) decoding and word meaning, (2) comprehending details, (3) determining the main idea, (4) reference usage, (5) inference, and (6) analysis of literature.

The Writing area includes the use and understanding of: (1) handwriting, (2) mechanics (spelling, punctuation), (3) word usage, (4) sentence formation, and (5) composition.

Objectives in the Mathematics area include the use and understanding of: (1) numerical concepts, (2) computational operations, (3) measurement concepts, (4) geometric concepts, and (5) problem solving.

Tennessee

Tennessee has developed Education Objectives and test questions in the areas of Mathematics, Spelling, Language and Reading. The Mathematics section includes the ability to use addition, subtraction, multiplication, division in whole numbers, fraction and decimal problems, as well as word problems and the use of graphs, measurements, etc.

The Spelling section contains problems on missing letters, syllabication, forming plurals, etc.

Language has problems dealing with grammar and letter writing. Problems in the Reading section include synonyms/ antonyms, contextual clues, story detail, cause and effect, conclusion, fact or opinion, following directions, and use of reference materials.

Texas

The information which was supplied dealt with requirements for the Texas Adult high school completion program rather than graduation requirements for traditional high school students. Although this information will not be used for comparative purposes, a listing of the sixty-five objectives for the competency-based adult education curriculum appears in Appendix D .

Utah

The state of Utah requires, in addition to earning a minimum number of credits, that students demonstrate functional competencies in the basic skills to graduate. Criterion-referenced tests are developed by the local school districts with guidance and assistance from the State Office of Education. Competency standards should enable the student to function effectively in society in the following areas:

(1) Reading, writing, speaking and listening;

(2) Computation (arithmetic);

(3) Processes and structure of democratic governance;

(4) As a consumer of goods and services;

(5) Problem solving.

Vermont

The state of Vermont has established a Basic Competency Program, but has left up to the local districts the materials and methods to be used in the assessment of the competencies. The Basic Competencies are objectives and minimum skills in the areas of reading, writing, speaking, listening, mathematics, and reasoning. Basic Competencies: A Manual of Information and Guidelines for Teachers and Administrators describes the competency program. A description of each competency area follows:

(1) Reading

-ability to read manuscript and cursive forms
-ability to identify high frequency words
-ability to identify words vital to safety
-ability to use reference materials and resources
-ability to use contextual clues to identify words
-ability to summarize
-ability to read aloud to a small group

(2) Writing

-ability to spell and punctuate
-ability to copy material
-ability to write messages, business and friendly letter
-ability to complete forms

(3) Speaking

-ability to give directions
-ability to answer a business telephone and solicit information on the phone
-ability to respond to question at a job interview

(4) Listening

-ability to follow directions given orally

(4) Listening (continued)

-ability to summarize and recapitulate significant events in a story given orally

(5) Mathematics

-numeration
-measurement
-money
-arithmetic

(6) Reasoning

-problem solving
-classification and organization
-making reasoned judgments
-research skills

Virginia

Effective in 1981, students in Virginia must demonstrate mastery of minimum competency in the areas of reading and mathematics on prescribed tests. Local authorities shall also require evidence that graduates have attained minimum competencies in the area of citizenship, history, government, and the knowledge and skills necessary to qualify for further education or employment.

Wyoming

The Wyoming State Board of Education has developed competencies but they are not yet required of local school districts. These competencies include: an ability to read, write, and compute with proficiency, an understanding of the process and structure of democratic governance and our free enterprise system.

Competency Comparisons

Twenty-four* of the forty-eight responding states indicated some type of involvement, at the state level, in either determining or requiring the specification of minimum competencies for high school graduation. Patterns of involvement included (1) specification of statewide competency requirements, (2) state policies/requirements that competencies be specified by local districts, and (3) optional state-developed competencies, with some in the process of being developed.

Minimum competencies related to basic skills, such as reading, writing, mathematics and language arts, tended to be the most frequently required. Table 3 indicates that fifteen of the twenty-four states specified competencies in this area. Competencies specific to life skills, such as occupational awareness, government and law, consumer economics, and health, were specified least frequently. Only three states indicated specific competency areas relating to life skills. Five states utilized a combination of basic skills and application to life skills. It should be indicated that in those states focusing primarily on basic skills, application of life skills was evident in

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* A total of twenty-six states were reviewed in the previous section. However, competency requirements in one of the states were for the adult high school diploma program while another state was in the process of determining the implication of setting minimum competency requirements. Competency statements from the remaining twenty-four states constituted the basis for comparison.

some areas while states focusing on life skills also incorporated basic skills.

The combination of basic skills and life skills constitutes the primary focus of the EHSDP at WCTI.

Reading competencies in various states ranged from "use reference/study skills" (which was identified most frequently) to "develop survival vocabulary." Five states indicated competencies in the general area of reading without specifically identifying the competencies. A distribution of minimum reading competencies appears in Table 4.

The EHSDP at WCTI incorporates reading competencies under the area of communication. The specific competency related to reading specifies "read materials from daily life; identify component parts." (See Appendix C.) This may be broadly interpreted to include skills such as word meaning, comprehension, inferences, conclusions, etc. The one competency frequently identified by states which is lacking in the EHSDP competencies is "use reference/ study skills."

Competencies mentioned most frequently by states with respect to writing were "write grammatically correct sentences" and "spell correctly" (Table 5). It is interesting to note that "write legibly" was a specific competency listed by six states. Five states indicated competencies related to writing without specifically identifying those competencies.

Table 3

Type of State Competency Requirements

Type of Competency	Number	Percent
Basic Skills	15	62.5%
Life Skills	3	12.5%
Combination-- Basic & Life Skills	5	20.8%
Not specified	1	4.2%
TOTAL	24	100.0%

Table 4

Number of States indicating specific competencies in Reading

Competencies Related to:	Frequency
Use reference skills/study skills	11
Determine word meaning from context	10
Comprehension	8
Word recognition and vocabulary	7
Draw conclusions	6
Determine main idea	6
Recognize fact and opinion	6
Follow directions	6
Make inferences	5
General area of reading	5
Read and use printed materials from daily life	1
Alphabetize	1
Read aloud to small group	1
Read manuscript and cursive forms	1
Analysis of literature	1

The EHSDP subsumes writing competencies under the generalized competency of communication. The two competencies in this area are "write an organized paragraph with main ideas, supporting details and conclusions" and "write a set of directions with five consecutive steps." The paragraph competency is similar to the competency indicated by six states and assumes grammatical correctness. However, specific competencies such as spelling are not identified. The EHSDP competency related to writing a set of directions is not found among those writing competencies identified from the states' listings.

Table 6 indicates a small number of competencies were identified with relationship to speaking and listening. This may be due to the fact that similar competencies appear in the reading and writing skills. Those competencies which were identified ranged from the general area of speaking and listening to "follow oral directions."

In the EHSDP, listening and speaking competencies comprise four of the nine competencies related to communication. Similariites with the states' competencies are in the area of formal speaking (giving a talk), distinguishing fact and opinion(identify bias), and interpreting communication. Differences appear in the incorporation of nonverbal communications in the EHSDP.

Minimum competencies in the area of mathematics focused on concepts ranging from addition to interpreting statistics. Table 7 indicates the most frequently iden-

Table 5

Number of States indicating specific competencies in Writing

Competencies Related to:	Frequency
Write grammatically correct sentences	8
Wpell correctly	8
Write a paragraph	6
Write a business letter	6
Write legibly	6
Punctuate correctly	6
Use English correctly	5
General area of writing	5
Fill out forms	4
Write messages/announcements	3
Capitalize correctly	3
Write personal letters	3
Composition	2
Supply information	1
Utilize writing in life situations	1

Table 6

Number of States indicating specific competencies in Speaking and Listening

Competencies Related to:	Frequency
General area of listening and speaking	3
Giving oral directions	2
Use formal and informal speaking styles	2
Communicate orally in daily life situations/job interviews	2
Interpreting aural communication	1
Distinguish fact from fiction in Radio and T.V. broadcasts	1
Answer telephone	1
Follow oral directions	1

tified competency was in the area of measurement with "recognizing geometric properties and figures" as the second most frequently mentioned area.

The EHSDP competencies in mathematics are, for the most part, contained under the general competency area of Computation (Appendix C); some competencies related to measurement fall under Scientific Awareness. Basically, the mathematical concepts tend to cover the same competencies as those specified by the states. "Interpret statistics" is one competency which is lacking in the EHSDP; geometrical concepts also appear to receive less emphasis.

Competencies, in the states which specified life skills, tended to be similar to competency areas of the EHSDP. Consumer economics competencies (Table 8) are similar to those contained in the consumer awareness area of the EHSDP.

Competencies in government/citizenship (Table 9) are reflected in the EHSDP under Social Awareness which indicates exercising rights and responsibilities and the impact of cultures and history on American life (Competencies #43,44, and 45, Appendix C).

Health competencies (Table 10) again tended to be similar in context to the three Health and Safety competencies contained in the EHSDP. The three competencies are (1) exercise responsibility for own health and that of family; (2) identify negative effects of major

Table 7

Number of States indicating specific competencies in Mathematics

Competencies Related to:	Frequency
Measurement(time, temperature, distance, capacity, covert measures)	11
Recognize geometric properties/figures	10
Percents	8
Problem-solve real life situations (money, budget, taxes, insurance, etc.)	7
Addition	7
Subtraction	7
Multiplication	7
Interpret statistics (mean and median)	7
Interpret graphs, tables, maps, etc.	7
Fractions	6
Decimals	6
Division	6
Use estimation, approximation and probability	6
General area of math	5
Use numbers and number concepts	4
Count quantities	1
General area of computation	1

Table 8

Number of States indicating specific competencies in Consumer Economics

Competencies Related to:	Frequency
Personal financial planning	1
Legal rights in selling and buying	1
General area of consumer economics	1

Table 9

Number of States indicating specific competencies in Government/Citizenship

Competencies Related to:	Frequency
Governmental functions	2
Business and legal rights	2
General Area of Citizenship and government	2
Relationship between current societal environmental problems and individual's role	1
Participation in governmental process	1

Table 10

Number of State indicating specific competencies in Health

Competencies Related to:	Frequency
Recognize and practice sound health habits	1
Demonstrate preventative and emergency action for health and safety	1
Use of leisure activities, cultural arts, and humanities in personal well-being	1
Identify harmful effects of poor health habits	1

health threats; (3) state preventative techniques.

Another area of similarity in life skills competencies related to occupational knowledge/preparedness. The analysis of occupational career goals (Table 11) are similar to EHSDP competencies. "Demonstrate skills necessary to obtain employment" are closely related to the EHSDP competencies of "identify characteristics of a good worker" and "prepare portfolio for job application."

Other areas related to life skills which were identified and did not fit into established categories were aesthetic and humanistic expression, analyze, evaluate, and reason. While one of the least mentioned areas in terms of state minimum competency requirements had to do with aesthetic expression, that comprises a competency area related to Self Awareness in the EHSDP (See Competencies #31, 32,33, and 34, Appendix C).

Summary

Minimum competencies, with respect to high school graduation, in the basic skills areas of reading, writing, listening, speaking, and mathematics, tended to be similar to EHSDP competencies in Communication and Computation. Areas of difference were related to certain skills which do not appear in the EHSDP as specific competencies.

Minimum competency requirements for high school graduation in states which focus on life skills tended to be similar to EHSDP competencies related to Occupational Preparedness, Scientific Awareness, Health and Safety,

Table 11

Number of States indicating specific competencies in Occupational Knowledge

Competencies Related to:	Frequency
Analyze occupations	2
Demonstrate skills necessary to obtain employment	2
Analyze personal career goals	1
General area of occupations	1

and Decision Making. EHSDP competencies contained within the area of Aesthetic Expression tended to be lacking in the majority of competency statements which were reviewed.

Chapter V

Summary, Conclusions, and Recommendations

The existence of alternative adult high school completion programs inevitably leads to questions concerning program content in comparison with regular high school curriculum. Questions of this nature have been raised with respect to the External High School Diploma Program (EHSDP) at Waukesha County Technical Institute (WCTI). The EHSDP is a competency-based high school completion program which was designed to provide an alternative for adults desiring to obtain a high school diploma.

The specific purpose of this study was to compare EHSDP competencies with minimum high school competency requirements in (a) local school districts within the district boundaries of WCTI and (b) selected states. In order to fulfill this purpose the following questions were raised:

(1) What are the minimum competency requirements in various school districts within the WCTI district?

(2) What are the minimum competency requirements for high school graduation in various states?

(3) What are the similarities and/or differences between these competencies and the competencies required for graduation from the EHSDP at WCTI?

The findings related to question one are based upon interviews with administrators from eleven of the twelve public school districts within the district boundaries of WCTI. The one local school district which currently conducts competency testing related to high school graduation,

focused on competencies in mathematics, reading, and writing.

One of the districts awarding the External High School Diploma utilized the Adult Performance Level Survey, which specifies competencies in Consumer Economics, Occupational Knowledge, Community Awareness, Health, Government and Law and related skills of reading, writing, computation and problem solving. However, the survey is primarily an assessment measure rather than a requirement for high school graduation.

The EHSDP contains sixty-four competencies representing general competency areas of Communication, Computataion, Self Awareness, Aesthetic Expression, Health and Safety, Social Awareness, Consumer Awareness, and Scientific Awareness. The competencies are similar to the Adult Performance Level Survey competencies.

In order to determine the minimum competency requirements for high school completion in various states, letters requesting this information were sent to Chief State School Officers in the fifty states. Responses from 48 of the officers, or their representatives, indicated that twenty-four of the states are involved, at the state level, in either prescribing or identifying minimum competency requirements for graduation.

A compilation of competencies indicated the primary emphasis was on basic skills related to reading, writing, speaking and listening, and mathematics (computation). A

focused on competencies in mathematics, reading, and writing.

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A compilation of competencies indicated the primary emphasis was on basic skills related to reading, writing, speaking and listening, and mathematics (computation). A

few states focused competency requirements on life skills such as consumer economics, health, government/citizenship, and occupational knowledge.

In general, basic skill competencies tended to be similar to those communication and computation requirements contained within the EHSDP.

Minimum competency requirements for high school graduation in states which focus on life skills tended to be similar to the External High School competencies related to occupational preparedness, scientific awareness, consumer awareness, social awareness, health and safety, and decision making.

Differences in competencies were apparent in certain types of skills which have not been specially identified in the EHSDP. These differences included: (1) reference/study skills, (2) write legibly in manuscript or cursive form, (3) spell correctly, and (4) interpret statistics, determining mean and median. Geometric concepts also appeared to receive less emphasis in the EHSDP.

EHSDP competencies contained within the area of aesthetic expression tended to be lacking in the majority of minimum competency statements which were reviewed.

Based upon this review of competencies it was concluded that competencies which are required in the EHSDP at WCTI are, with few exceptions, similar to minimum competency requirements for high school graduation in the twenty-four states reviewed.

Recommendations

Based upon the findings of this study the following recommendations are suggested:

(1) Consideration be given to the advisability of specifying competencies related to Spelling and Study skills.

(2) Computational competencies be expanded in the area of interpretation of statistics.

(3) External Diploma Program competencies continue to be reviewed and revised as societal and educational needs change.

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Appendix A

Letter to Chief State School Officers

THE UNIVERSITY OF WISCONSIN—MILWAUKEE/ P.O. Box 413, Milwaukee, Wisconsin 53201

SCHOOL OF EDUCATION
DEPARTMENT OF ADMINISTRATIVE LEADERSHIP

AREA CODE 414
963-4740

March 14, 1980

Dear

I am currently engaged in an evaluation of the External High School Diploma Program for adults at Waukesha County Technical Institute in Pewaukee, Wisconsin. One component of this study is directed toward the identification of minimum competencies which are necessary for high school graduation in various school districts and states. These competencies will be compared with the 64 competencies which are contained in the External High School Diploma Program at Waukesha County Technical Institute.

Although the possibility of devising a questionnaire related to various competencies was considered, this option was rejected due to the fact that significant competency requirements might have been overlooked in the development of a questionnaire. Consequently, I have decided to solicit copies of the specific competencies which are required for high school graduation. Specifically, I am requesting--if you choose to participate--that you forward to me a description of the competencies which are required for high school graduation in your state. I am also requesting your permission to identify these competencies in the final report and subsequent publication.

Your participation in the project is, of course, completely voluntary and your informed consent to participate and approval for the identification of competencies will be demonstrated by sending a copy of the minimum high school competency requirements to me. Your participation will contribute not only to the evaluation of the External High School Diploma Program in Wisconsin, but will also aid in an understanding of the various competencies which are required for high school graduation throughout the country. As indicated previously, the identification and comparison of various competency requirements will be contained in a

final report. Additionally, the intent is to develop subsequent publications and to present the findings of this study at state and national adult education conferences. If you would like additional information concerning this project, please feel free to contact me at (414) 963-4995.

This project has been reviewed and approved by the University of Wisconsin-Milwaukee's Institutional Review Board for the Protection of Human Subjects. If you have any complaints about your participation in this study, please contact Dr. William K. Hoffman, Vice-Chairman of the Board, Graduate School, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, WI, 53201 (414) 963-5120.

Sincerely,

Wanda C. Hole, Ph.D.
Assistant Professor

WH/bk

Appendix B

Follow-up Letter
to Chief State School Officers

THE UNIVERSITY OF WISCONSIN—MILWAUKEE/ P.O. Box 413, Milwaukee, Wisconsin 53201

SCHOOL OF EDUCATION
DEPARTMENT OF ADMINISTRATIVE LEADERSHIP

AREA CODE 414
963-4740

April 16, 1980

Dear

On March 14, 1980, I wrote to you concerning an evaluation of the External High School Diploma Program for adults at Waukesha County Technical Institute in Pewaukee, Wisconsin. One important component of this study is directed toward the identification of minimum competencies which are necessary for high school graduation in various states. These competencies will be compared with the 64 competencies which are contained in the External High School Diploma Program at Waukesha County Technical Institute.

At the present time, I have received responses from thirty-four states. Although not all of the states which responded have minimum competency requirements, we are finding the information concerning general requirements for graduation to be most beneficial to this study. In order to present an accurate analysis of state requirements for high school graduation and the relationship of these requirements to the External High School Diploma Program, it is necessary to obtain input from all states. Information concerning minimum competency requirements for high school graduation in _____ would be extremely helpful to this evaluation project. If there are no minimum competency requirements, I would appreciate receiving information concerning general requirements for high school graduation in _____.

In case you did not receive my original letter, I am enclosing a copy of the letter which was sent to all Chief State School Officers. If you have already sent the information which was requested, please disregard this letter.

Thank you for your assistance in providing information which will help us to evaluate the External High School Diploma Program at Waukesha County Technical Institute.

Sincerely yours,

Wanda C. Hole, Ph.D.
Assistant Professor

WH/bk

Enclosure

Appendix C

Waukesha County Technical Institute
External High School Diploma Program
Sixty-four Competencies

Waukesha County Technical Institute
External High School Diploma Program

Sixty-four Competencies*

A. Communication

1. Read materials from daily life; identify component parts.

2. Listen to taped presentation; identify component parts.

3. Listen to taped presenation; identify and describe elements of inflection and bias used to manipulate listener.

4. View: identify and describe effect of visual stimuli.

5. View: identify non-verbal messages communicated by visual stimuli.

6. View: identify inferences from captionless materials.

7. Write an organized paragraph with main ideas, supporting details and conclusion.

8. Write a set of directions with five consecutive steps.

9. Speak, giving a short talk on selected topic.

B. Computation

10. Add whole numbers.

11. Subtract whole numbers.

12. Multiply whole numbers.

13. Divide whole numbers.

14. Add decimals.

* These competencies are based upon the New York State External High School Diploma Program Competencies.

15. Subtract decimals.

16. Multiply decimals.

17. Divide decimals.

18. Compute percentage.

19. Compute area.

20. Add dollars and cents.

21. Subtract dollars and cents.

22. Multiply dollars and cents.

23. Divide dollars and cents.

24. Estimate cost in dollars and cents.

25. Interpret charts and graphs and/or scale drawings: obtain information, draw conclusion.

26. Make gross estimates in fractions and percentages from graphic representation.

C. Self-Awareness

Decision Making

27. Apply decision-making process by solving a problem.

28. Identify own values and goals.

29. Identify own roles.

30. Identify own needs.

Aesthetic Expression

31. Show awareness of art in everyday living.

32. React to or create art.

33. React to a live performance (concert, theatre or musical theatre).

34. Identify uses of music to manipluate emotions.

Health and Safety

35. Exercise responsibility for own health and that of family.

36. Identify negative effects of major health threats.

37. State preventative techniques, symptoms and causes of major disease.

D. Social Awareness

38. Collect community resources.

39. Compare community resources.

40. Use community resources.

41. Locate geographical names and places on a map.

42. Estimate time and distance.

43. State a contribution of two different cultures to American life.

44. Use history (past events) in making decisions and/or plans.

45. Exercise rights and responsibilities of citizenship.

46. Function within a group.

47. State the effects of one group on another group.

E. Consumer Awareness

48. Apply decision-making process to comparative shopping.

49. Describe sources of consumer information.

50. Distinguish between fact and opinion in everyday consumer practice.

51. Initiate the process for registering a consumer complaint regarding goods and/or services.

52. Compare sources of consumer credit in making a purchase decision.

F. Scientific Awareness

53. Read scale on standard measuring device.

54. Solve simple equations.

55. Convert measurements.

56. Classify information.

57. Differentiate between observations and conclusions.

58. State the relationship between the individual and the environment.

G. Occupational Preparedness

59. Identify own vocational interests and aptitudes.

60. Locate and classify information about job choices in local community.

61. Compare various occupations.

62. Identify characteristics of a good worker.

63. Prepare portfolio for job application.

64. Define payroll deduction terms.

Appendix D

Sixty-five Objectives
for the Competency-Based
Adult Education Curriculum in Texas

Sixty-Five Objectives for the Competency-Based Adult Education Curriculum in Texas

Occupational Knowledge: To develop a level of occupational knowledge which will enable adults to secure employment in accordance with their individual needs and interests.

1. To build an oral and written vocabulary related to occupational knowledge.
2. To identify sources of information (e.g., radio broadcasts, newspapers, etc.) which may lead to employment.
3. To define occupation categories in terms of the education and job experience required, and to know minimum requirements of given occupations.
4. To be aware of vocational testing and counseling methods which help prospective employees recognize job interests and qualifications.
5. To understand the differences among commercial employment agencies, government employment agencies and private employers.
6. To prepare for job applications and interviews.
7. To know standards of behavior for various types of employment.
8. To know attributes and skills which may lead to promotion.
9. To know the financial and legal aspects of employment.
10. To understand aspects of employment other than financial which would affect the individual's satisfaction with a job.

Consumer Economics: To manage a family economy and to demonstrate an awareness of sound purchasing principles.

1. To build an oral and written consumer economics vocabulary. This should be an ongoing process through each objective.
2. To be able to count and convert coins and currency, and to convert weight and measures using measurement tables and mathematical operations.

Consumer Economics (continued)

3. To understand the concepts of sales tax and income tax.

4. To be aware of the basic principles of money management, including knowledge of the basics of consumer decision-making.

5. To use catalogs, consumer guides, and other reference documents to select goods and services.

6. To be aware of factors that affect costs of goods and services and to determine the most economical places to shop.

7. To be aware of the principles of comparison shopping, and to be aware of the relationship of price to quality among brand names, and between "firsts" and "seconds" and to be able to substitute economy for quality according to individual needs.

8. To know the various methods by which goods are packaged and to know which methods are most cost-effective in terms of quality and storage.

9. To be able to take advantage of sales by knowing where to find them, by planning for their eventuality, and by being able to determine the best buys essential to the individual.

10. To be aware of advertising techniques and to recognize appropriate and inappropriate forms of selling and advertising.

11. To know how to order food and to tip in a restaurant.

12. To be aware of different stores where home furnishings can be purchased and to determine the best buys for essential and luxury items based on individual needs and resources.

13. To determine housing needs and to know how to obtain housing and utilities based on those needs.

14. To know how to buy and maintain a car economically.

15. To know basic procedures for the care and upkeep of personal possessions (home, furniture, car, clothing, etc.) and to be able to use resources relating to such care.

Consumer Economics (continued)

16. To know the various media of exchange and to be familiar with banking services in the community.

17. To develop an understanding of credit systems.

18. To collect information concerning the types of insurance available and to be able to select the best insurance for the individual and his family.

19. To know the resources available to the consumer in the face of misleading and/or fraudulent product/service claims or tactics.

20. To understand the implication of consumption vis-a-vis finite world resources and to recognize that each individual's pattern of consumption influences the general welfare.

Health: To ensure good mental and physical health for the individual and family.

1. To develop a working vocabulary related to health, especially as it relates to basic medical and physiological terminology, for accurate reporting of symptoms and following a doctor's directions in applying treatments.

2. To understand how basic safety measures can prevent accidents and injuries and to recognize potential hazards, especially as such hazards relate to home and occupational safety.

3. To know medical and health services in the community.

4. To understand the physical and psychological influences of pregnancy as well as the need for proper prenatal care.

5. To understand the importance of family planning, its physical, psychological, financial and religious implications, and to have knowledge of both effective and ineffective methods of birth control.

6. To understand general child rearing practices and procedures for guarding the health and safety of a child and to apply proper action in accordance with needs and resources.

7. To understand the special health needs and concerns of the adolescent (and his parents) and to become acquainted with some ways to ease the transition from childhood to adulthood.

Health (continued)

8. To understand what contributes to good mental and physical health and to apply this understanding toward preventive care and health maintenance.

9. To understand the interaction of self as a member of small groups (family, work, club, class) and to use this understanding to promote effective interpersonal coping skills.

10. To be able to apply first aid in emergencies and to inform proper authorities of sudden illnesses, various accidents or natural disasters.

11. To plan for health or medical insurance, and to be aware of available financial assistance for medical or health problems.

12. To understand what constitutes a proper diet and to plan meals according to individual needs and resources.

13. To understand federal control of various drugs and items for health protecion and to understand how public reaction influences this control.

Government and Law: To promote an understanding of society through government and law and to be aware of governmental functions, agencies and regulations which define individual rights and obligations.

1. To develop a working vocabulary related to government and law in order to understand their functions in society and in the personal life of the individual. This should be an ongoing process as each objective is covered.

2. To develop an understanding of the structure and functioning of the federal government.

3. To investigate the relationship between the individual citizen and the government.

4. To understand the relationship between the individual and the legal system.

5. To obtain a working knowledge of the various legal documents which the individual will need as a member of society.

6. To explore the relationship between government servies and the American tax system.

Community Resources: To understand that community resources, including transportation systems, are utilized by individuals in society to obtain a satisfactory mode of living.

1. To build and oral and written vocabulary pertaining to community resources and to define community resources in terms of (a) services to community members and (b) services to persons outside the community or non self-supporting members of society (unemployed, criminals, insane, etc.).

2-3. To know the types of community services provided for members of society including the purposes of and how to gain access to these services.

4. To understand how and when to apply for community services, such as Social Security and Medicare.

5. To know various recreational services available in the community.

6. To be able to utilize information services of the community.

7. To be aware of the people and agencies in the community whose job it is to register and act upon citizen complaints.

8. To build an oral and written vocabulary of transportation terms, including car insurance terms.

9. To be able to recognize and utilize signs related to transportation needs.

10. To develop a familiarity with transportation schedules and to calculate fares.

11. To be able to find and utilize information facilities.

12. To learn the use of maps relating to travel needs.

13. To recognize time zone boundaries and understand the concept of daylight saving time.

14. To request information on and make verbal and written travel and overnight accommodations/ reservations.

15. To understand the relationship between transportation and public problems.

16. To understand driving regulations, including safety, courtesy, and rules such as having a driver's license, car license plates, etc.